

Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

5
1. (Currently amended) A plant for unloading stacks (5) of thermoformed products from a cage (4) containing product stacks (5), which comprises a support structure (2), at least one support plate (3) for a respective cage (4) containing product stacks (5), which is
10 mounted for rotation on said support structure (2), drive means (8) to cause said support plate (3) to effect angular movements of a preset amplitude around a horizontal axis, so as to angularly move its respective containing cage (4) between an erect position, in which the said stacks (5) of thermoformed products contained therein extend in a substantially vertical direction, and an inclined unloading position, expeller means (12) designed to
15 expel product stacks (5) of thermoformed objects from said cage (4) when said support plate (3) is in inclined unloading position, and a conveyer (20) for receiving stacks (4) of thermoformed objects unloaded from said containing cage (4) located downstream of the unloading position of said support plate, (3) and drive means arranged to move the said support plate vertically between a plurality of unloading positions to unload stacks of
20 thermoformed objects at different levels onto said conveyer.

2. (Cancelled).

3. (Currently amended) A plant according to claim 1, wherein said receiving conveyer (20)
25 is hinged about a horizontal axis and has actuating means (22) to arrange itself into inclined position substantially at the same angle of inclination as the said support plate (3) in its inclined unloading position.

4. (Currently amended) A plant according to claim 1, comprising for unloading stacks of
30 thermoformed products from a cage containing product stacks, which comprises a support structure, at least one support plate for a respective cage containing product stacks, which is mounted for rotation on said support structure, drive means to cause said support plate to effect angular movements of a preset amplitude around a horizontal axis, so as to angularly move its respective containing cage between an erect position, in
35 which said stacks of thermoformed products contained therein extend in a substantially

vertical direction, and an inclined unloading position, expeller means designed to expel product stacks of thermoformed objects from said cage when said support plate is in inclined unloading position, a conveyer for receiving stacks of thermoformed objects unloaded from said containing cage located downstream of the unloading position of said support plate, and a couple of moving guides (25, 26) extending above and parallel to the direction of movement of said receiving conveyer (20) and spaced from one another by a distance substantially equal in length to the height of the said stacks (4) to be transported, wherein one moving guide next to the said support plate is shorter than the other moving guide by a given length at the said support plate.

10

5. (Cancelled).

6. (Original) A plant according to claim 4, wherein said pair of guides is spaced by an adjustable distance from each other.

15

7. (Currently amended) A plant according to claim 1, wherein said receiving conveyer (20) has transverse and parallel partitions (28) for the stacks (5).

8. (Currently amended) A plant according to claim 7, wherein said receiving conveyer (20) takes, when loaded with stacks (5) of thermoformed objects, an attitude in accordance with to a handling system placed downstream of said taking-away conveyer (20).

9. (Currently amended) A plant according to claim 1, comprising in combination a device (30) for transferring stacks or portions of stacks (5, 5a, 5b), positioned upstream of said support plate (3), a stacking station (31) of thermoformed objects designed to feed the said transfer device (30), and a rotating conveyer (32) with several template-carrying radial arms for mouldings of thermoformed objects.

10. (New) An apparatus for unloading stacks of thermoformed products from a cage containing product stacks, said cage including: a support structure, at least one support plate for a respective cage containing product stacks, which is mounted for rotation on said support structure, a first drive apparatus to cause said support plate to effect angular movements of a preset amplitude around a horizontal axis, so as to move its respective

30

containing cage angularly between an erect position, in which said stacks of thermoformed products contained therein extend in a substantially vertical direction, and an inclined unloading position, expeller apparatus for expelling product stacks of thermoformed objects from said cage when said support plate is in an inclined unloading position, a
5 conveyer for receiving stacks of thermoformed objects unloaded from said containing cage located downstream of the unloading position of said support plate, and a second drive apparatus arranged to move the said support plate vertically between a plurality of unloading positions to unload stacks of thermoformed objects at different levels onto said conveyer.

10

11. (New) An apparatus according to claim 10, wherein said conveyer is hinged about a horizontal axis and has actuating means to arrange itself into inclined position substantially at the same angle of inclination as the said support plate in its inclined unloading position.

15 12. (New) An apparatus according to claim 10, comprising a couple of moving guides) extending above and parallel to the direction of movement of said receiving conveyer and spaced from one another by a distance substantially equal in length to the height of said stacks (4) to be transported, wherein one moving guide next to the said support plate is shorter than the other moving guide by a given length at the said support plate.

20

13. (New) An apparatus according to claim 12, wherein said pair of guides is spaced by an adjustable distance from each other.

14. (New) An apparatus according to claim 10, wherein said conveyer has transverse and
25 parallel partitions for the stacks.

15. (New) An apparatus according to claim 14, wherein said conveyer takes, when loaded with stacks of thermoformed objects, an attitude compatible with a handling system placed downstream of said conveyer.

30

16. (New) An apparatus according to claim 10, further comprising, in combination, a device for transferring stacks or portions of stacks, positioned upstream of said support plate, a stacking station of thermoformed objects designed to feed the said transfer device,

and a rotating conveyer with several template-carrying radial arms for mouldings of thermoformed objects.

5

10

15

20

25

30

35

40

45